

Stretch Andorra to San Lorenzo on the Geneva - Ventimiglia Railway Line.

The stretch between Andorra and San Lorenzo belongs to the future Geneva - Ventimiglia railway line in Italy to carry trains which may reach speeds of 240km/h. This stretch is 19,331km long and runs parallel to the coastline through mountains and valleys.

Due to the orography of the region, this stretch is mainly composed of tunnels dug with a TBM (tunnel boring machine). Between the tunnels and the viaducts there are transition sections consisting of artificial, reinforced-concrete galleries which are between 1.00m and 1.20m thick, depending on soil levels.

The railway viaducts are composed of post-tensioned slabs with spans of 25.00m - 25.00m (Cervo Torrent),

21.00m - 21.00m (Varcavello Torrent) and 16.20 m - 21.00m - 21.00m - 16.20m (Evigno Torrent) and of pre-cast simply supported beams with spans of 9.00m x 34.00m (Prino Viaduct) and 10.00m x 30.00m (Caramagna Viaduct).

Furthermore, there are two train stations in the towns of Diano and Imperia. Part of the Diano station rests on the post-tensioned slab of the Evigno Torrent whilst the Imperia station rests on reinforced concrete frames away from the riverbed of the Impero Torrent and upon three post-tensioned isostatic slabs with 42.00 m spans set upon the riverbed itself. Below these post-tensioned slabs there is a composite road bridge anchored to the piers that support the slabs of the station.



Italy /2009 Project data

Structural type:
Post-tensioned slabs, isostatic beams
and composite bridges
Location:
Stretch Andorra to San Lorenzo on the
Geneva - Ventimiglia Railway Line. Italy
Opening Date:
2009
Proprietor:
Italian Railway Network (RFI)
Construction:
Ferrovia-Agroman /
Cossi Costruzioni SPA.
Scope of Works:
Construction Project